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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
FERRIS, DERRICK W	

ART UNIT	PAPER NUMBER
2663	

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/801,533	MEKKITTIKUL ET AL.	
	Examiner	Art Unit	
	Derrick W. Ferris	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 February 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☒ Claim(s) *22-25* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 March 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. This Office action is in response to applicant's paper filed 2/16/2005. **Claims** 1-25 as amended are still in consideration for this application. Applicant has amended claims 1-3, 8-9, 11-13, 18, and 21. Applicant has canceled no claims. Applicant has added claims 22-25.

2. Examiner **withdraws** the anticipated rejections to ***Fawaz and Gerstel***. The following comments fully address applicant's arguments with respect to the rejection. Applicant's arguments, see Applicant's remarks, filed 2/16/2005, with respect to *Fawaz and Gerstel* have been fully considered and are persuasive. In particular, applicant's amendment(s) have overcome the claim rejection(s). As such, please find a rejection as necessitated by amendment.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1-9 and 11-19** are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,865,149 B1 to *Kalman et al.* ("*Kalman*").

As to **claim 1**, see e.g., figure 4 (and not figure 5 with respect to the optimal interm wrapping mechanism). As such, a first and second ring are respectively shown in the figure. Also shown are a plurality of network nodes coupled to both rings. Each node 0-7 has a detector which detects a failure in a segment of either the first or the

second ring and broadcasts a failure condition signal to the plurality of network nodes in the form of a link status message, see e.g., column 6, lines 30-67. Furthermore, a switch-over occurs at impacted nodes (i.e., each of the network nodes) where a switch-over circuit within the network node of data packet insertion switches data packets from one ring to another ring in response to a failure signal, see e.g., column 5, lines 50-67. Thus although an interim wrapping solution is optional, when each nodes receives the link state message, the node re-computes its routing table based on the updated information and uses this information to route current packets in the opposite direction as the fault, see e.g., step (c) at column 5, lines 58-60. As such, in figure 4 the data packet insertion switch is switch 0 which route the packet to switch 1 instead of switch 7.

As to **claim 2**, see the rejection for claim 1 and in particular, column 5, lines 50-67.

As to **claim 3**, see the rejection for claim 1 and in particular, column 5, lines 50-67 where the failure conditional signal is the link status message.

As to **claim 4**, the ring in figure 4 is a BFSR.

As to **claim 5**, data packets are routed based on the destination which is a flow.

As to **claim 6**, data packets are switched based on error rates which are impacted by congestion, see e.g., column 5, lines 33-41 and column 8, lines 1-16.

As to **claim 7**, different degrees of protection are taught based on the cost and priority of the link.

As to **claim 8**, the status message may be a unicast message, see e.g., column 6, lines 50-51.

As to **claim 9**, the status message may be a broadcast (i.e., multicast) message, see e.g., column 6, lines 50-51 and sent either on one or both of the rings.

As to **claim 11**, see similar rejection to claim 1.

As to **claim 12**, see similar rejection to claim 2.

As to **claim 13**, see similar rejection to claim 3.

As to **claim 14**, see similar rejection to claim 4.

As to **claim 15**, see similar rejection to claim 5.

As to **claim 16**, see similar rejection to claim 6.

As to **claim 17**, see similar rejection to claim 7.

As to **claim 18**, see similar rejection to claim 8.

As to **claim 19**, see similar rejection to claim 9.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. **Claim 21** is are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,865,149 B1 to *Kalman et al.* ("*Kalman*") in view of "Optical Data Networking: Protocols, Technologies, and Architectures for Next Generation Optical Transport Networks and Optical Internetworks" to *Rodriguez-Moral et al.* ("*Rodriguez-Moral*").

As such to **claim 21**, *Kalman* discloses similar limitations as mentioned e.g., in the rejection for claim 1.

Kalman may be silent or deficient to the further limitation of using lambdas and redirecting data from a first lambda to a second lambda. Examiner notes that the above limitation is taught by the reference since different fibers are used to implement figure 4, see e.g., column 1, lines 25-45. However, assuming the above is not clear then examiner notes the obviousness rejection below as well.

Rodriguez-Moral teaches the further recited limitation with respect to WDM and DWDM, see e.g., first column on page 1855.

The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Kalman* by clarifying that WDM or DWDM can be implemented on an optical network thus meeting the limitation by using the references in combination.

As such, examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be to switch lambdas. In particular, *Rodriguez-Moral* cures the above-cited deficiency by providing a motivation found at e.g., first column on page 1855. Examiner also notes a reasonable expectation of success since one skilled in the art would note that packet bleeding would work in either of the two prior art teachings since it is not dependent on either implementation. Thus the references either in singular or in combination teach the above claim limitation(s).

7. **Claims 10 and 20** is are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,865,149 B1 to *Kalman et al.* ("*Kalman*") in view of "A Fast Restoration System for ATM-Ring-Based LANs" to *May et al.* ("*May*").

As such to **claim 10,** *Kalman* may be silent or deficient to the further limitation of packet bleeding. In particular, *Kalman* teaches dropping packet based on priority, see e.g., column 14, lines 59-67 where packets are dropped or delayed as necessary, see e.g., step 7 in figure 8. Thus *Kalman* teaches one form of packet bleeding. Assuming this form is not proper, examiner also notes another form based on the obviousness rejections below where the optional interm wrapping may or may not be applied.

May teaches the further recited limitation above at e.g., at the top left-hand column on page 95.

The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Kalman* by clarifying a different form of packet bleeding.

As such, examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be to check and discard cells that are destined for unreachable nodes. In particular, *Kalman* cures the above-cited deficiency by providing a motivation found at e.g., the top left-hand column on page 95. Thus the references either in singular or in combination teach the above claim limitation(s).

As to **claim 20**, see similar rejection to claim 10.

Allowable Subject Matter

8. **Claims 22-25** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Derrick W. Ferris
Examiner
Art Unit 2663

DWF

RICKY NGO
PRIMARY EXAMINER

6/21/05